

2. Use of a polymer as claimed in Claim 1 wherein the transparent polymer is chosen from the group comprising PMMA, polycarbonate and polystyrene.

3. Use of a polymer as claimed in Claim 1 wherein the polymer is an optical fibre, the radius of which is between 0.25 and 0.70×10^{-2} meters and the length of the fibre is between 0.2 and 1.6 meters.

4. Use of a polymer as claimed in claim 3 wherein the magnitude of the fluorescent light emitted from such a fibre is given by the equation $Aa/Ae=2L/r$ wherein Aa is the surface area of the fibre and Ae is the area at which the fluorescent light is emitted.

5. (Amended) A display comprising a fluorescent dye doped polymer as defined in Claim 1, consisting of a plurality of fibres which may include individual fibres, a film or a sheet, which polymer when excited by light emits the characteristic colour of the dye, characterised in that the polymer is doped with a combination of dyes.

6. A display as claimed in Claim 5 wherein the polymer is doped with two or three dyes.

7. A display as claimed in Claim 6 wherein the polymer is doped with Nile Red and Coumarin 6.

8. A display as claimed in Claim 6 wherein the polymer is doped with Nile Red 0.04% and Coumarin 6.

9. A display as claimed in Claim 6 wherein the polymer is doped with Nile Red 0.04%, Coumarin 6 and Bis-MSB.

10. (Amended) A display as claimed in Claim 5 consisting of a plurality of fibres acting as pixels.

11. (Amended) A display as claimed in Claim 5 in a flat panel conformation wherein the bottom surfaces and edges of the polymer film are covered with a highly reflective additional layer which acts as a mirror performing the role of total internal reflection of all light entering into the polymer.

12. A flat panel display as claimed in claim 11 whereby the top surface of the polymer is covered with a dielectric polymer film.

B3
13. (Amended) A flat panel display as claimed in Claim 11 wherein the stack is constituted of an alternating sequence of two dielectric films with alternately high and low refractive indices.

14. A flat panel display as claimed in Claim 12 comprising a dielectric stack whereby the composition of this dielectric stack acts as an interference filter to allow substantially 100% transmission of light from air into the polymer for wavelengths used for excitation of the dye.

B4
15. (Amended) A flat panel display as claimed in Claim 11 where the stack has substantially 100% refection for light wavelengths emitted from the fluorescent dyes, the dielectric layers have been vacuum evaporated, spin coated or sputtered onto the surface of the polymer.

16. A display as claimed in Claim 14 whereby thin films of two different polymers, with the two different refractive indices, can be applied to the polymer surface sequentially and vacuum pressed and/or thermally treated for each layer.

REMARKS

The claims have been amended above for consideration by the Examiner.

If any matters can be handled by telephone, Applicant requests that the Examiner telephone Applicant's attorney at the number below.